

## **STATUS OF THE CLAIMS**

The status of the claims of the current application stands as follows:

Claims 1-6: **(Canceled)**

7. **(Currently Amended)** An integrated redundancy architecture for providing BIST redundancy allocation to an embedded memory system, the architecture comprising:
- a BIST for identifying and transmitting row and column addresses from failed embedded memory;
  - a first memory element for storing row addresses that have been assigned for repair by row redundancy;
  - a second memory element for storing column addresses that have been assigned for repair by column redundancy;
  - a third memory element for accumulating ~~the~~ failed row and column addresses transmitted from said BIST and assigning ~~them~~ each of the failed row and column addresses a particular weight value based on the number of ~~like~~ the failed row and column addresses already accumulated in said third memory element and ~~their~~ the relative locations of said failed row and column addresses within the memory system; and
- means for ~~allocating redundancy resources of the memory system~~ assigning ones of the failed row and column addresses having weights greater than a threshold for permanent storage in said first or second memory element.
8. **(Previously Presented)** An integrated redundancy architecture according to claim 7, wherein said first, second, and third memory elements include the function of content addressable memory.
9. **(Previously Presented)** An integrated redundancy architecture according to claim 7, wherein said first memory element includes a register for storing row addresses that have been assigned for repair by row redundancy.
10. **(Previously Presented)** An integrated redundancy architecture according to claim 7, wherein said second memory element includes a register for storing column addresses

that have been assigned for repair by column redundancy.

11. **(Previously Presented)** An integrated redundancy architecture according to claim 7, wherein said third memory element includes a register for accumulating the failed row and column addresses transmitted from said BIST.
12. **(Previously Presented)** An integrated redundancy architecture according to claim 7, further comprising a finite state machine having a decision algorithm, said finite state machine in electrical communication with said first memory element, said second memory element, and said third memory element.
13. **(Previously Presented)** An integrated redundancy architecture according to claim 12, wherein said finite state machine allocates redundancy resources of said memory system according to said decision algorithm.
14. **(Previously Presented)** A method of providing BIST redundancy allocation to an embedded memory system, comprising the steps of:
  - a. identifying failed row and column addresses of defective memory blocks in said embedded memory system;
  - b. accumulating said failed row and column addresses identified in step a in a third memory element;
  - c. assigning failed row and column addresses accumulated in step b a particular weight value based on the number of like addresses already accumulated and their relative locations within the memory system; and
  - d. transferring said failed row and column addresses associated with the most fails from said third memory element to first and second memory elements according to a decision algorithm.
15. **(Previously Presented)** A method according to claim 14, wherein at least one of said first, second, and third memory elements include content addressable memory.
16. **(Previously Presented)** A method according to claim 14, wherein said first memory element includes a register for storing said failed row addresses.

17. **(Previously Presented)** A method according to claim 14, wherein said second memory element includes a register for storing said failed column addresses.
18. **(Previously Presented)** A method according to claim 14, wherein said third memory element includes a register for accumulating said failed row and column addresses transmitted from the BIST.
19. **(Previously Presented)** A method according to claim 14, wherein said steps c and d include using a finite state machine having a decision algorithm, said finite state machine being in electrical communication with said first memory element, said second memory element, and said third memory element.
20. **(Previously Presented)** A method according to claim 19, wherein said finite state machine allocates redundancy resources of said memory system according to said decision algorithm.
21. **(Previously Presented)** An integrated circuit comprising:
  - an embedded memory system having a plurality of row and column redundancies;
  - a BIST for identifying row and column addresses of defective memory blocks in said embedded memory system;
  - a first memory element;
  - a second memory element; and
  - a third memory element for accumulating said row and column addresses identified by said BIST and assigning them a particular weight value based on the number of like addresses already accumulated in said third memory element and their relative locations within the memory system.
22. **(Previously Presented)** An integrated circuit according to claim 21, further comprising a finite state machine having a decision algorithm, said finite state machine in electrical communication with said first memory element, said second memory element, and said third memory element.
23. **(Previously Presented)** An integrated circuit according to claim 22, wherein said finite state machine allocates redundancy resources of said memory system according to said

decision algorithm.

24. **(Previously Presented)** An integrated circuit according to claim 21, wherein at least one of said first, second, and third memory elements include content addressable memory.
25. **(Previously Presented)** An integrated circuit according to claim 21, wherein said first memory element includes a register for storing said failed row addresses.
26. **(Previously Presented)** An integrated circuit according to claim 21, wherein said second memory element includes a register for storing said failed column addresses.

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